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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,456	04/12/2001	Jean-Michel Philippoz	AD 6802 US NA	3326

23906 7590 05/15/2003

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WILMINGTON, DE 19805

EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 05/15/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/833,456

Applicant(s)

PHILIPPOZ ET AL.

Examiner

Christopher P Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,8. 6) ☐ Other:

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**DETAILED ACTION**

**WITHDRAWN REJECTIONS**

The 35 U.S.C. 112 rejections of claims 1, 11 and 16-19 of record in Paper #4, Pages 2-4 Paragraph 2 have been withdrawn due to Applicant's amendments in Paper #7.

The 35 U.S.C. 102 rejections of claims 1, 3-7, 9-14, and 16-20 of record in Paper #4, Pages 4-5 Paragraph 3 have been withdrawn due to Applicant's amendments in Paper #7.

The 35 U.S.C. 103 rejections of claims 8 and 15 of record in Paper #4, Pages 6-7 Paragraph 4 have been withdrawn due to Applicant's amendments in Paper #7.

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The 35 U.S.C. 103 rejection of claim 2 of record in Paper #4, Pages 7-9 Paragraph 5 has been withdrawn due to Applicant's arguments in Paper #7.

**NEW REJECTIONS**

**Claim Rejections - 35 USC § 102**

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, and 9-10 rejected under 35 U.S.C. 102(b) as being anticipated by Vercesi et al (USPN 5,830,395).

Vercesi et al anticipate an article made from at least one thermoplastic composition, said thermoplastic composition comprising a thermoplastic polymeric matrix comprising at least one thermoplastic polymer including homopolymers, copolymers and terpolymers of polyacetals, polyamides, polyesters, polyurethanes, polyethylene terephthalate glycols, polycarbonates, polyvinyl chlorides, etc, and mixtures or blends thereof (col.3, 1.41-46). The thermoplastic composition also

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comprises short aramid fibers having a diameter of less than or equal to 150 microns, an average length distribution of 0.1 to 8mm (col.2, 1.13-19), and a Canadian Standard Freeness of less than or equal to 500mL (col.5, 1.23-29). The aramid fibers are present in an amount of about 1 to 85 weight percent (col.3, 1.57-67). After extrusion the article is a solid preform. Note the method of making the article such as blow molding or

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extruding receives little patentable weight. Note the recitation that the article is a solidified hollow article has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

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U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-7, and 9-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Gotz et al (USPN 5,468,530) in view of Vercesi et al (USPN 5,830,395).

Gotz teaches a solidified hollow article and process of making that solidified hollow article (col.1, line 29) comprising at least one thermoplastic composition (col. 1, lines 6-15) comprising a thermoplastic polymeric matrix and an effective amount of from 0 to 60% by weight of short aramid fibers (col. 6, lines 26-29). The thermoplastic composition matrix comprises at least one thermoplastic polymer including homopolymers, copolymers, and terpolymers of polyamides, poly(phenylene ethers) (abstract), polyesters, copolymers of esters and ethers (col.6, lines15-16), polyacrylates, blends of polypropylene and ethylene propylene diene (col. 4, lines 51-54), polyolefines (col. 5, lines 24-25), polystyrenes (col. 2, lines 65-67), copolymers of styrene and acrylonitrile, and copolymers of acrylonitrile butadiene styrene (col. 5, lines 51-55). Gotz also teaches that a rectangular hollow articles of the invention is produced with a length of 61 cm (col. 11, lines 24-25), and the molding materials of the invention are converted into shaped articles by blow molding (col. 10, lines 10-13). In order to blow mold an article the polymer is made into a solid preform, inserted into a mold, and then gas is blown through the

preform to form a solidified hollow article. Gotz et al fail to explicitly teach specifications regarding the aramid fibers. However, Gotz does teach that glass fibers that are considered equivalent have diameter from 6 to 20 micrometers and average length between 0.08 and 0.5mm. Vercesi et al teach that aramid fibers mixed into a polymer for extruding articles and preforms have a diameter of less than or equal to 150 microns, an average length distribution of 0.1 to 8mm (col.2, 1.13-19), and a Canadian Standard Freeness of less than or equal to 500mL (col.5, 1.23-29). Vercesi et al also teach that these particular aramid fibers are added to thermoplastic polymeric materials, in order for the polymer to meet high temperature and high modulus requirements and to reinforce the polymer (col.1, 1.47-62). Gotz et al and Vercesi et al teach the same process of making extruded articles or preforms with fiber-reinforced thermoplastic. Vercesi et al teach specifications for aramid fibers used in this process and Gotz et al teaches that after forming a preform by this process the preform is blow molded to form solidified hollow articles. One of ordinary skill in the art would have recognized that when forming aramid fiber-reinforced preforms that are later blow molded into solidified hollow articles, aramid fibers are used having a diameter of less than or equal to 150 microns, an average length

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distribution of 0.1 to 8mm, and a Canadian Standard Freeness of less than or equal to 500mL, as taught by Vercesi et al. One of ordinary skill in the art would have also recognized that after forming a preform by the extrusion process of Gotz et al or Vercesi et al with the aramid fibers of Vercesi et al the preform is blow molded, in order to form solidified hollow articles.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to use the aramid fibers of Vercesi et al to form the solidified hollow article, formed by extrusion followed by blow molding, of Gotz et al, in order to form a reinforced extrudable thermoplastic that has higher temperature capabilities and higher modulus performance, as taught by Vercesi et al.

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1. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotz et al (USPN 5,468,530) in view of Vercesi et al (USPN 5,830,395).

Gotz et al and Vercesi et al taken as a whole teach a solidified hollow article and method of making a solidified hollow article as claimed in claims 1 and 11. Gotz et al also teach that the articles are produced having a large volume (col. 10, lines 16-19) and teach examples of hollow articles in length



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up to 61cm (col. 11, lines 24-25). Gotz and Vercesi fail to teach an example of a hollow article with a length greater than 1m. The claimed length is a design choice and would be determined through routine experimentation by one having ordinary skill in the art and would be obvious to Gotz and Vercesi depending on the desired optimum length absence of showing new and unexpected results. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have modified the length of the hollow article because the optimum length of the article would be optimized depending on the desire end product.

#### ***ANSWERS TO APPLICANT'S ARGUMENTS***

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Applicant's arguments filed in Paper #7 regarding the 35 U.S.C. 112 rejections of record have been considered but are moot since the rejections have been withdrawn.

Applicant's arguments filed in Paper #7 regarding the 35 U.S.C. 102 rejections of claims 1, 3-7, 9-14, and 16-20 as anticipated by Gotz et al have been considered but are moot since the rejections have been withdrawn.

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Applicant's arguments filed in Paper #7 regarding the 35 U.S.C. 103 rejections of claims 8 and 15 over Gotz et al have been considered but are moot since the rejections have been withdrawn.

Applicant's arguments filed in Paper #7 regarding the 35 U.S.C. 103 rejection of claim 2 over Gotz et al in view of Echigo et al in further view of Lam has been considered but are moot since the rejections have been withdrawn.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440.

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The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes

Examiner

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CPB

May 2, 2003

*Chris Bruenjes*

*[Signature]*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772* *5/13/03*